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November 1, 2004

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G. Peter Nichols

Name of applicant, assignee or Registered Representative

Signature

November 1, 2004

Date of Signature

Our Case No. 659/1682 (K-C 15442)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Topolkaraev et al.

Serial No.: 09/840,754

Filing Date: April 23, 2001

For BIODEGRADABLE FILMS HAVING ENHANCED DUCTILITY AND BREATHABILITY

Examiner: Ferguson

Group Art Unit No.: 1774

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
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P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

By the filing of this Appeal Brief in accordance with 37 CFR § 41.37, Appellant respectfully requests reconsideration by the Board of Patent Appeals and Interferences in the above-identified patent application.

Real Party in Interest

The real party in interest is Kimberly Clark Worldwide, Inc. having a place of business at 401 North Lake Street, Neenah, WI 54956 by virtue of an assignment recorded at Reel 011736, Frame 0156.

Related Appeals and Interferences

Currently, there are no pending appeals or interferences related to the present appeal.

Status of Claims

1. Claims 1-5, 16, 20, 21, 23-27, and 29 are present and active in the application.

2. Claims 6-15, 17-19, 22, and 28 have been canceled.

3. Claims 1-5, 16, 20, 21, 23-27, and 29 are being appealed.

Status of Amendments

The amendment to claim 1 filed on June 30, 2004 in Response to the Final Office Action dated April 30, 2004 was entered as indicated in the Advisory Action dated July 28, 2004. No amendment has been filed subsequent to the Advisory Action dated July 28, 2004.

Summary of Claimed Subject Matter

The present invention relates to a biodegradable stretched film that comprises a biodegradable polymer and a water soluble polymer (Abstract). The film has a thickness from about 0.01 to about 5 mils (p. 8, lines 16-17), is breathable, and is porous and wettable (p. 8, lines 8-9). The film has been stretched from about 100 to

about 500 percent of an original length (p. 13, lines 15-25) to provide a water vapor transmission rate greater than about 2500 $g/m^2/24$ hrs (p. 8, line 9-10; p. 14, lines 4-6) and an elongation at break of greater than about 100% (p. 8, lines 14-15).

The present invention also contemplates those stretched films having a water vapor transmission rate of greater than about 3000 $g/m^2/24$ hrs or greater than about 3500 $g/m^2/24$ hrs (p. 8, lines 10-12), as well as a stretched film having an elongation at break of greater than about 200% (p. 8, lines 14-15). The stretched film can have a thickness of from about 0.01 to about 2 mils (p. 8, lines 17-19).

The present invention also includes stretched films where the biodegradable polymer is an aliphatic polyester (p. 6, lines 2-3) and where the biodegradable polymer is selected from the group consisting of polycaprolactone, polybutylene succinate, poly(butylene succinate-adipate), polylactic acid, terpolymers of terephthalic acid, adipic acid, and 1,4-butanediol, and copolymers and mixtures thereof (p. 6, lines 1-9).

The present invention also includes those stretched films having a biodegradable polymer and a water soluble polymer selected from the group consisting of polyethylene oxide, polyethylene glycol, polyvinyl alcohol, and copolymers and mixtures thereof and, more particularly, polyethylene oxide, polyethylene glycol or a copolymer thereof (p. 6 lines 27-31).

The present invention may also include a stretched film where the biodegradable polymer is polycaprolactone and the water soluble polymer is polyethylene oxide (Abstract).

The stretched film can include from about 1% to about 50% water soluble polymer by weight of the film (p. 7, lines 36-38) or more particularly from about 5% to about 30% water soluble polymer by weight of the film (p. 7, line 38 to p. 8, line 1).

The stretched film can include from about 50% to about 99% biodegradable polymer by weight of the film (p. 8, lines 1-3) or more particularly from about 70% to about 95% biodegradable polymer (p. 8, lines 3-4).

Grounds of Rejection to be Reviewed on Appeal

Appellant wishes the Board to review the rejection of claims 1-5, 16, 20, 21, 23-27, and 29 under 35 U.S.C. § 103(a) as being obvious in view of Kroll (United States Patent No. 6,432,547).

Argument

Appellant respectfully requests the Board to reverse the rejection of claims 1-5, 16, 20, 21, 23-27, and 29 under 35 U.S.C. § 103(a) as being obvious in view of Kroll and to allow all the claims.

A. Kroll Does Not Establish a *Prima Facie* Case of Obviousness of Any of the Pending Claims

MPEP 2142 states that "[to] establish a *prima facie* case of obviousness ... the prior art reference ... must teach or suggest all the claim limitations." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Examiner admits that Kroll does not teach or suggest a "stretched film" or a film that is stretched from about 100 to about 500 percent of its original length to provide a water vapor transmission rate ("WVTR") greater than about 2500 $g/m^2/24$ hours and an elongation at break of greater than about 100%. The Examiner, however, contends that "it would have been obvious to one of

ordinary skill in the art to stretch the film of Kroll since such a modification would have involved a mere change in the size of a component".

The claimed stretched film has certain definite properties (WVTR and elongation at break) that are not achieved by a non-stretched film. One need only compare the WVTR of the exemplified films described in Table 1 of Kroll or Example 7 of the present specification, where an improvement in the range of four times was demonstrated, to know that the claimed stretched film is structurally different from the Kroll film. The films described in Table 1 of Kroll have a WVTR of, at most 920 $g/m^2/24$ hours, which is nearly 2½ times less than the minimum WVTR claimed in the present claims.

As for elongation at break, Kroll admits that when "the barrier layer is very thin or for embodiments that employ a composition which is not radiation curable, the barrier layer is typically of low film strength, obtaining its tear resistance from the substrate it is coated to" (col. 2, lines 23-26). Thus, Kroll teaches away from the present film, which requires a thickness from about 0.01 to about 5 mils (which is thinner than Kroll's admitted conventional thickness of 0.8 to 2 mils), yet exhibits an elongation at break of greater than about 100%.

For at least these reasons, and in accordance with MPEP 2142, Appellant respectfully submits that a *prima facie* case for the obviousness of rejected claims 1-5, 16, 20, 21, 23-27, and 29 in view of Kroll has not been established. Accordingly, Appellant respectfully requests reversal of the rejection.

B. Kroll Does Not Establish a *Prima Facie* Case of Obviousness of Claims 5 and 16

Claims 5 and 16 limit the water soluble polymer to a polyethylene oxide, polyethylene glycol or a copolymer thereof (claim 5) or to polyethylene oxide (claim 16).

Kroll does not establish a *prima facie* case of obvious with respect to the use of these particular water soluble polymers. The Examiner points to col. 5, lines 7-13 of Kroll for a disclosure of polyethelene oxide. That passage, however, does not teach the use of polyethylene oxide. At best, that passage provides a guess by Kroll as to whether polyethylene oxide may be suitable. In fact, the passage states:

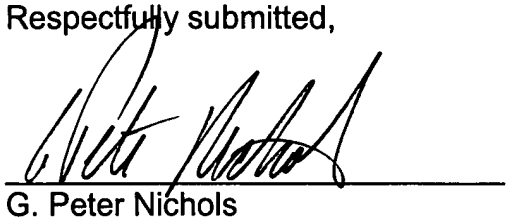
> Other crystalline water sensitive polymers surmised to be suitable for use as the thermoplastic polymer in the invention include polyethylene oxide available from Union Carbide (Danbury, Conn.) and crystalline polyesters. (col. 5, lines 7-10)

This passage merely provides an invitation to try polyethylene oxide. The Federal Circuit, however, has repeatedly stated that "obvious to try" is not to be equated with obviousness under 35 U.S.C. §103. *The Gillette Co. v. S.C. Johnson & Son Inc.* 919 F.2d 720, 725, 16 USPQ2d 1923, 1928 (Fed. Cir. 1989). An "obvious-to-try" situation exists when a general disclosure may pique the scientist's curiosity, such that further investigation might be done as a result of the disclosure, but the disclosure itself does not contain a sufficient teaching of how to obtain the desired result, or that the claimed result would be obtained if certain directions were pursued. *Id.* Kroll, at best, provides a general disclosure. In reality, Kroll simply provides a guess as to the use of polyethylene oxide. A guess does not establish a *prima facie* case of obviousness. Therefore, the rejection of claims 5 and 16 should be reversed.

Conclusion

In conclusion, Appellant respectfully submits Kroll would not have rendered obvious all the pending claims (or the specific claims 5 and 16). Therefore, the rejection should be reversed and all the claims should be allowed.

Respectfully submitted,



G. Peter Nichols
Registration No. 34,401
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200

Claims Appendix

1. A biodegradable stretched film comprising:

a biodegradable polymer; and

a water soluble polymer, wherein the film has a thickness from about 0.01 to about 5 mils, is breathable and further wherein the film is porous and wettable and is stretched from about 100 to about 500 percent of an original length to provide a water vapor transmission rate greater than about 2500 g/m^2/24 hrs and an elongation at break of greater than about 100%.

2. The film of claim 1, wherein the biodegradable polymer is an aliphatic polyester.

3. The film of claim 1, wherein the biodegradable polymer is selected from the group consisting of polycaprolactone, polybutylene succinate, poly(butylene succinate-adipate), polylactic acid, terpolymers of terephthalic acid, adipic acid, and 1,4-butanediol, and copolymers and mixtures thereof.

4. The film of claim 1, wherein the water soluble polymer is selected from the group consisting of polyethylene oxide, polyethylene glycol, polyvinyl alcohol, and copolymers and mixtures thereof.

5. The film of claim 1, wherein the water soluble polymer is polyethylene oxide, polyethylene glycol or a copolymer thereof.

16. The film of claim 1, wherein the biodegradable polymer is polycaprolactone and the water soluble polymer is polyethylene oxide.

20. The film of claim 1 having a water vapor transmission rate of greater than about 3000 g/m^2/24 hrs.

21. The film of claim 1 having a water vapor transmission rate of greater than about 3500 $g/m^2/24$ hrs.

23. The film of claim 1 having an elongation at break of greater than about 200%.

24. The film of claim 1, wherein the film includes from about 1% to about 50% water soluble polymer by weight of the film.

25. The film of claim 1, wherein the film includes from about 5% to about 30% water soluble polymer by weight of the film.

26. The film of claim 1, wherein the film includes from about 50% to about 99% biodegradable polymer by weight of the film.

27. The film of claim 1, wherein the film includes from about 70% to about 95% biodegradable polymer by weight of the film.

29. The film of claim 1 having a thickness of from about 0.01 to about 2 mils.

TRANSMITTAL LETTER			Case No. **659/1682 (K-C 15,442)**
Serial No. **09/840,754**	Filing Date **April 23, 2001**	Examiner **K. Nguyen**	Group Art Unit **1774**
Inventor(s) **Topolkaraev et al.**			
Title of Invention **BIODEGRADABLE FILMS HAVING ENHANCED DUCTILITY AND BREATHABILITY**			

TO THE COMMISSIONER FOR PATENTS

Transmitted herewith is **a (1) Appeal Brief with $330 check; (2) PTO Transmittal letter (in duplicate).**

☐ Small entity status of this application under 37 CFR § 1.27 has been established by verified statement previously submitted.

☐ Applicant claims small entity status. See 37 CFR1.27.

☐ Petition for a _____ month extension of time.

☐ No additional fee is required.

☐ The fee has been calculated as shown below:

	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Small Entity Rate	Small Entity Add'l Fee	or	Other Than Small Entity Rate	Other Than Small Entity Add'l Fee
Total	14	Minus	29	0	x $9 =			x $18 =	0
Indep.	1	Minus	3	0	x 42 =			x $84 =	
First Presentation of Multiple Dep. Claim					+ $140 =			+ $280 =	
					Total add'l fee	$		Total add'l fee	$ 0

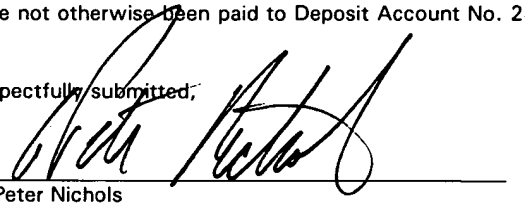
☐ Please charge Deposit Account No. 23-1925 (BRINKS HOFER GILSON & LIONE) in the amount of $_____. A duplicate copy of this sheet is enclosed.

☐ A check in the amount of $_____ to cover the filing fee is enclosed.

☒ The Commissioner is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this communication or credit any overpayment to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.

☒ I hereby petition under 37 CFR § 1.136(a) for any extension of time required to ensure that this paper is timely filed. Please charge any associated fees which have not otherwise been paid to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.

Respectfully submitted,



G. Peter Nichols
Registration No. 34,401
Attorney for Applicants
Customer No. 00757

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200

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Date: November 1, 2004 Signature: